

USM-500

Professional Tower/Standalone Medical Computer with NVIDIA IGX Thor™



Features

- Stylish, user-friendly design tailored for modern hospital environments
- Powered by NVIDIA IGX Thor™ with advanced functional safety and security for medical AI applications
- Equipped with NVIDIA RTX PRO™ 6000 Blackwell Max-Q Workstation Edition, offering up to 5581 FP4 TFLOPs (Sparse) for advanced AI workloads.
- Integrated NVIDIA ConnectX®-7 NIC networking with dual 100GbE QSFP ports for ultra-high bandwidth data transport
- Industrial-grade AI platform purpose-built for medical and industrial deployments, enabling secure high-frame-rate data ingestion



Introduction

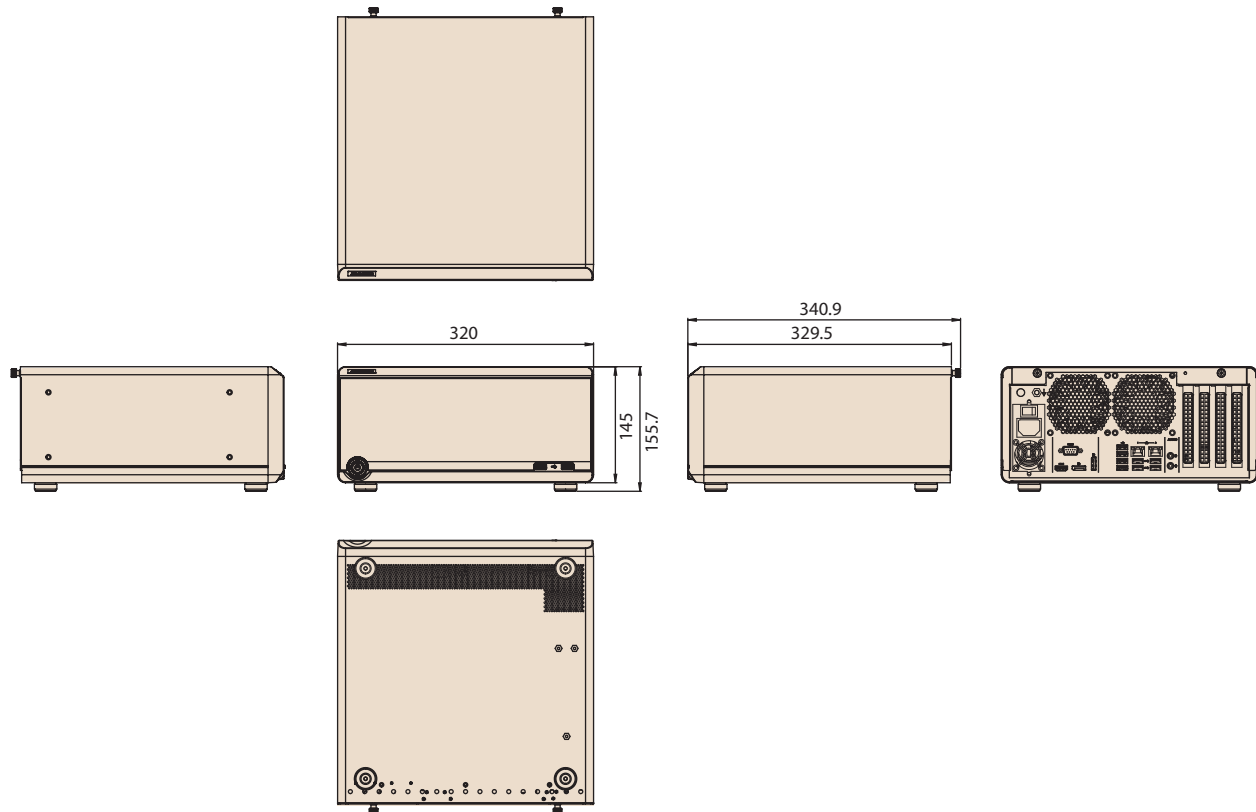
USM-500, powered by NVIDIA IGX Thor, delivers exceptional AI compute at the edge. Accelerated by NVIDIA RTX PRO 6000 Blackwell Max-Q Workstation Edition, it offers up to 5581 FP4 TFLOPs (Sparse) for advanced, data-intensive workloads. Integrated NVIDIA ConnectX-7 networking with dual 100GbE QSFP ports enables ultra-high-bandwidth, real-time data transport. Engineered for mission-critical medical deployments, it integrates advanced functional safety, enterprise-grade security, and proven reliability to support trusted deployment of confidential AI and next-generation autonomous systems.

Specifications

Model Name		USM-500	
Computing System	NVIDIA Module	NVIDIA IGX™ T7000	
	CPU		NVIDIA Thor SoC
			14-core Arm Neoverse-V3AE 64-bit CPU
			64 KB l-cache, 64 KB dCache
			1 MB L2 cache per core
	Integrated GPU		2,560-core NVIDIA Blackwell architecture GPU with fifth-generation Tensor Cores
	AI Performance		Optional NVIDIA RTX PRO 6000 Blackwell Max-Q Workstation Edition up to 5581 TFLOPS (FP4-Sparse)
	Vision Accelerator		1x PVA v3
	Memory		128GB LPDDR5X
			256-bit
		4266 MHz	
Wi-Fi (M.2 2230)			Optional Wi-Fi 6
Bluetooth		Optional Bluetooth 5.3	
OS		IGX OS 2.0	
Storage	Primary Storage	512GB SSD (M.2 2280) (max. 2TB)	
	Secondary Storage	Available as option (max. 2TB x 4)	
I/O Ports	DC in	1	
	USB 3.2 Type A	6	
	USB 3.2 Type C	1	
	DP	1	
	QSFP	2	
	LAN	2	
	Line-out	2	
Mic-in	x 1		
Expansion	PCIe Slot	1 x PCIe GEN5 (x8), 1 x PCIe GEN5 (x16)	
Power Input	Input Voltage	AC 100-240V, 11.5-5.5A, 50-50Hz or 200-240V, 5.5A, 60-50Hz, 900W	
Certification		CE, FCC, IEC/EN 60601-1-2 4.1th, IEC/EN 60601-1 3.2th(compliance)	

Dimensions

Unit: mm



Order Information

Standard Model

Part Number	Description	PSU	CPU (on board)	RAM (on board)	M.2 SSD	2.5" SSD	WIFI
USM-500-IGXTG0A1	USM-500IGX with NVIDIA RTX PRO 6000 Blackwell Max-Q Workstation Edition/2T M.2/2T 2.5"/WIFI	900W	V3AE	128GB	2T	2T	AX210
USM-500-IGXTG0A1	USM-500IGX barebone with USM-500IGX barebone/2T M.2	900W	V3AE	128GB	2T	x	x

Component Offerings

M.2 SSD

Part Number	Description
SQF-C8MV2-256GDEDM	SQF M.2 2280 720-D 256G 3D TLC BiCS5
SQF-C8MV2-512GDEDM	SQF M.2 2280 720-D 512G 3D TLC BiCS5
SQF-C8MV4-1TDEDM	SQF M.2 2280 720-D 1T 3D TLC BiCS5
SQF-C8MV4-2TDEDM	SQF M.2 2280 720-D 2T 3D TLC BiCS5

Graphic Card

Part Number	Description
SKY-QUAD-6000QB-96	NVIDIA RTX PRO 6000 Blackwell Max-Q Workstation Edition

Cable

Part Number	Description
1700018705	Power Cord EU 3P 10A 250V 183cm
1702002600	Power Cord UL 3P 10A 125V 183cm
96CB-POWER-B-1.8MA	POWER CORD H05VV-F 3G 0.75MM 1.8M BK(G)_CN
1700023855-11	M Cable HDMI 19P(M)/HDMI 19P(M) 100cm w/ Lock
1700029605-01	200 cm DVI to DVI Cable

2.5" SSD

Part Number	Description
SQF-S25V1-256GDSDC	SQF 2.5" SATA SSD 650-D 256G 3D TLC (BiCS5)
SQF-S25V2-512GDSDC	SQF 2.5" SATA SSD 650-D 512G 3D TLC (BiCS5)
SQF-S25V4-1TSDC	SQF 2.5" SATA SSD 650-D 1T 3D TLC (BiCS5)
SQF-C8MV4-2TDEDM	SQF M.2 2280 720-D 2T 3D TLC BiCS5 (-20-85°C)

Capture Card

Part Number	Description
VEGA-3003-S0	FPGA-based 4K UHD Video Capture Card
VEGA-3312-S1G0	VEGA-3312_SDI+HDMI
VEGA-3312-DOL121	VEGA-3312 w/o PL DDR

WiFi Kit

Part Number	Description
EWM-W165M201E	Wi-Fi 6 + BT Module 2.4/5/6GHz M.2 2230 No.Vpro
EWM-W165M202E	Wi-Fi 2230 M.2 Key E

I/O View

